

Touch Communication¹

Richard Kinney
President, Hadley School for the Blind

How can others communicate with us through the sense of touch? Our success in finding answers to this question will determine significantly our freedom and our happiness as persons who are deaf and blind.

Little children can show us one way. Toddlers take our index finger and point to the thing or place in which they are interested. They bring their favorite toys and place them in our hands. They lead us to the kitchen sink to show that they want a drink of water. They pat our hand or climb into our laps and give us a hug to show affection. They express themselves by gestures and by actions.

Universal Communication Methods

Taking his deaf-blind father's hand, a three-year-old boy signals "yes" by moving the hand up and down, "no" by moving it back and forth. To show pride in some new accomplishment, he seizes his father's wrists and claps his father's hands together as if applauding. If hurt in a fall, he brushes his father's fingertips across a tear-wet cheek. If he wants something, he finds ways of letting the fact be known!

Adults, too, can use the language of gesture and action, as "the kiss that speaks volumes" happily illustrates. If our friends do not instinctively realize how thoughtful or time-saving a gesture or action can sometimes be, a tactful suggestion on our part will usually be welcomed. By a slight, continuing pressure on our hand, for instance, a friend can let us know he is speaking to someone else in the group. The pressure not only saves us from interrupting, but also conveys a sense of companionship and assurance that we have not been forgotten.

We can always secure information or even carry on a kind of conversation by asking questions that can be answered by a "yes" or "no." Many deaf-blind people interpret one tap as meaning "yes," two taps as "no," three taps as "I don't know." Be sure, however that you and the other person are in agreement on the meaning of the signals, for there is as yet no universally accepted standard. A sample interchange by this method might be:

"Nice of you to stop tonight, Mr. Brown, to take me to the meeting of the chess club. Is the weather good?"

"No."

"Is it raining?"

"No."

"Good heavens, are we having our first snow of the winter?"

"Yes."

"Do I need to wear galoshes?"

"Yes."

"Thanks for warning me. The last thing I want to do is get wet feet and catch cold."

Success with this method depends on asking questions in a logical order, beginning with general questions and proceeding to particular ones. Be sure to avoid double inquiries, such as "Is the room too warm or too cool for your comfort?" To answer such a question with a yes or no would tax the wisdom of Solomon! The tactful questioner will also avoid such queries as the famous "Have you stopped beating your wife? Answer yes or no."

Yet for a full-fledged, satisfying conversation, we do need communication through words. Unless one has received long, arduous, and difficult training in reading lips by touch—training available

¹ Excerpted from *Independent Living Without Sight and Hearing*

at only a very few schools that specialize in the teaching of deaf-blind children—the words must be spelled out letter by letter. Many and varied methods have been worked out by which this can be done with surprising speed. Some of the most rapid and convenient methods require special learning on the part of both the deaf-blind person and the person speaking to him. We will consider these a little later. Now, however, let us discuss some “universal” communication methods that almost anyone can use to converse with us immediately—provided we ourselves are ready.

The deaf-blind person who learned to read print before losing his or her sight will find the knowledge invaluable. He or she can carry a pocket-sized alphabet plate that bears raised print letters easily recognized by touch. A friend, an acquaintance, even a stranger, can communicate at once simply by taking the deaf-blind person’s index finger and placing the tip on the desired letters as words are spelled out. The alphabet plate has extra advantages for the deaf-blind person who cannot use his or her voice, since he or she can in turn point to the raised letters in spelling out his or her own side of the conversation. If we have not read print for a long time or if we have never read it and must learn from the beginning, the alphabet plate offers excellent practice. The raised letters are always there to be studied or reviewed, and the method can be used as slowly as is necessary.

Once our skill in recognizing print letters is adequate, a much faster method than use of the embossed alphabet plate becomes possible. The person to whom we are talking can simply print capital letters—often called block letters—in the palm of our hand with the tip of his or her index finger. Block letters may be received in either hand, depending on which is more comfortable. Raise the hand forward, waist-high with elbow bent, elbow touching the side, palm up, fingers extended together. Ask the other person to print capital letters on your palm, making the letters large and one after the other on the same spot. When both hands are occupied with work, some deaf-blind people receive block letters printed on the shoulder or back. At least in the beginning, you may find print letters easier to recognize if the other person holds your own index finger like a pencil and prints on a table or in your other hand.

As with any other communication method, printing in the palm takes practice to master. Printing in your own palm several times a day will help you build skill. The method has the great advantage that nearly every sighted person knows

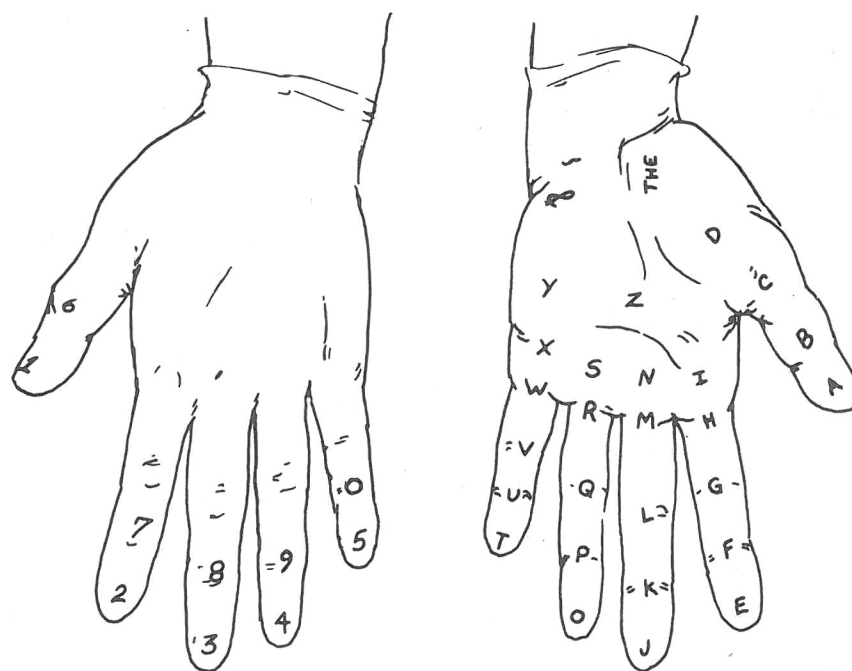
how to print—and a large number of blind persons do, too. Your hand is always with you—on the street, on the beach, at work. The method has no special equipment to forget or mislay.

Sometimes the deaf-blind person who lost his or her sight in childhood finds printing in the palm difficult to learn or to read with speed. What are the other methods by which we can take advantage of the fact that almost all sighted people are familiar with print?

Alphabet Glove

One such other method is the alphabet glove—a thin, white cotton glove on which the letters of the alphabet have been printed with indelible ink at definite spots memorized by the deaf-blind wearer. The sighted person spells out his or her words by touching the letters. With practice, the method can become very quick. Because the letters are systematically arranged, their positions are easy to memorize. The glove is convenient to carry. Friends who use it often will soon find that they have unconsciously learned the locations of the letters, just as we have, and thereafter they can use the alphabet glove method without a glove!

With the help of a friend, each of us can provide his or her own glove, thereby ensuring a perfect fit. The glove is usually worn on the left hand, and the wearer extends his or her hand away from himself or herself toward the speaker. After we have purchased a suitable white cotton glove, the friend assisting us should mark it with indelible ink in such a way that the print letters appear right side up for the person facing the wearer. The letters of the alphabet are printed on the palm side of the



Back of left hand

Palm of left hand

glove and are located on the tips of the fingers, the joints of the fingers and the palm of the hand at the base of the fingers while the numerals appear on the fingernails and knuckles on the back of the hand.

The arrangement of the letters and numerals on the glove is systematic and is as follows:

The Letters

Extend the left hand with the palm face up. The first four letters are located in the line of the thumb:

- A—tip of the thumb
- B—first joint of the thumb
- C—second joint of the thumb
- D—palm of the hand at the base of the thumb
(the section commonly thought of as the fleshy part of the thumb)

The next five letters are located in the line of the index finger:

- E—tip of the index finger
- F—first joint of the index finger
- G—second joint of the index finger
- H—third joint of the index finger
- I—palm of the hand at the base of the index finger

The next five letters are located in the line of the middle finger:

- J—tip of the middle finger
- K—first joint of the middle finger
- L—second joint of the middle finger
- M—third joint of the middle finger
- N—palm of the hand at the base of the middle finger

The next five letters are located in the line of the ring finger:

- O—tip of the ring finger
- P—first joint of the ring finger
- Q—second joint of the ring finger
- R—third joint of the ring finger
- S—palm of the hand at the base of the ring finger

The next six letters are located in the line of the little finger:

- T—tip of the little finger
- U—first joint of the little finger
- V—second joint of the little finger
- W—third joint of the little finger
- X—palm of the hand at the base of the little finger

- Y—palm of the hand midway between the third joint of the little finger and the wrist
- Z—center of the palm

The Numerals

Extend the left hand so that the palm is facing down. The first five numbers are located on the fingernails:

- 1—thumbnail
- 2—nail of the index finger
- 3—nail of the middle finger
- 4—nail of the ring finger
- 5—nail of the little finger

The next five numbers are located on the knuckles:

- 6—the first knuckle of the thumb
- 7—first knuckle of the index finger
- 8—first knuckle of the middle finger
- 9—first knuckle of the ring finger
- 10—first knuckle of the little finger

As with printing in the palm, a good way to build up speed in using the alphabet glove is to practice talking to ourselves, tapping out the words on our own hand. Be sure to memorize the location of the letters thoroughly before trying the glove with others. Blind friends can of course talk to us by this method only if they themselves also learn the position of the letters. You may be pleasantly surprised by the number of people with whom you can become “hand in glove!”

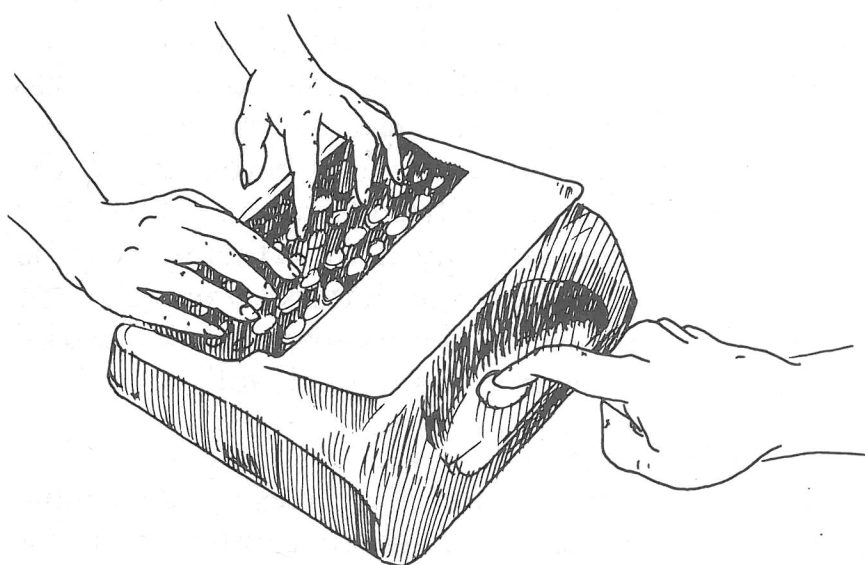
Braille Alphabet Card

A slow but simple method enables the deaf-blind person who can read braille to capitalize on the universal familiarity with inkprint of the sighted public. This method is the use of the braille alphabet card, a pocket-size card that bears both the inkprint and braille alphabet. A sighted friend can use the card by placing our index finger tip on the braille letter just below the equivalent print letter. A blind friend can use it by locating the braille letter he or she wishes to indicate and placing our finger tip upon it.

Tellatouch

Finally, an outstanding communication device for the good braille reader is the Tellatouch, a small machine resembling a miniature typewriter that raises corresponding braille letters under the deaf-blind reader's finger tip as the other person types. With practice, the Tellatouch can often be read at 60 words a minute or more, and the schools teach typing to so many people nowadays that a

good share of the persons we meet may actually be touch typists. Even those who cannot touch type are usually at least somewhat familiar with a typewriter keyboard and can do reasonably well by the famous one-fingered "search and sock" method. Further, the Tellatouch seems to appeal to a kind of toy instinct in many people, its use striking them as an enjoyable sort of game. Children love it especially—as do all who are young in heart and gadget conscious. To put a new friend at ease in using the Tellatouch, we can helpfully suggest that the capital sign be omitted for simplicity's sake. We should explain that the braille is easier to read if the typist presses the key all the way down rather than striking with a sharp, staccato motion. A blind friend should be warned that the keyboard omits the usual top row of numbers. Numbers are best spelled out. Someone who knows braille may prefer to use the six Braillewriter keys at the bottom of the keyboard rather than the typewriter keyboard itself.



Tellatouch

To develop our own ability to read the Tellatouch fluently, we can practice with advantage the often-repeated suggestion of talking to ourselves. By pressing the keys at random with one hand and identifying the rising braille characters with the tip of our favorite reading finger on the other hand, we can greatly enhance our reading skill with the device.

The Tellatouch is light and portable. It can be carried about as easily as a lady carries her handbag. Tellatouches are available from the American Foundation for the Blind in New York at a price well worth the investment.

Let us return for a moment to the subject of communication by gesture or action. A man's name is to him the sweetest sound in the language and the friend who has a special "name sign," such

as linking the little fingers, squeezing the shoulder, rippling the finger tips across the back of the hand, will enjoy saying hello to us at every opportunity. By giving our friends clever name signs we can promote the beginning of many fine conversations!

Special Communication Methods

We have discussed some communication methods that we termed universal because almost anyone can use them at once in communicating with us, provided that we ourselves are skilled in their use. Now let us discuss some communication methods that are special because their use does not require some special learning on the other person's part, no matter how well prepared we who are deaf-blind may be.

The question naturally arises regarding whether we should concern ourselves about special methods at all. Why not stick to universal ways that others can use at once? Will not other people always speak to us more often, more readily, and with more pleasure if they do not need to learn or remember special codes? The questions have a point, and some deaf-blind people do indeed rely on universal communication methods, certain of which, like the alphabet glove or the Tellatouch, are capable of impressive speed. Every deaf-blind person should definitely know at least one universal method by which others can communicate with him or her immediately. Such knowledge may be vital in an emergency. Even in a social sense, we will never be able to mingle freely in a group or acquire new acquaintances readily unless we have at our disposal a communication method that others will find rewarding from the start. If we can offer others a choice of such methods, so much the better. People tend to do again what they enjoy doing, and they will enjoy talking with us much more if they are offered a variety of methods from which to choose their favorite.

And this is exactly the point to which we have been leading. Though agreeing that knowledge of universal methods is necessary, many deaf-blind people also have one or more special methods they find congenial when talking among themselves, with members of their families, or with friends whom they meet often. The special method may be a favorite because of its speed, the warm personal hand contacts it involves, the particular uses to which it can be put, or simply because it seems relaxed and comfortable. Also, experience indicates that once a new acquaintance becomes sufficiently interested to learn a special method, he

or she is likely to grow so proud of his or her new skill that he or she takes every opportunity to use it!

In the United States, the one-hand manual alphabet is the most widely used special method. One of its merits is the possibility of flashing speed, a factor that has made it a favorite among deaf-blind college students. Another advantage is that it can be used in almost any position without need to look at the hands or to feel for specific areas on them. This manual alphabet reflects the personality, mood, and emphasis of the speaker to a remarkable degree, and the enthusiast who once described it as "an aristocrat among peons" may in some ways have been justified.

On the other hand, no pun intended, the one-hand manual alphabet is complicated to learn. It requires considerable practice to use with speed and even more practice to read with facility. Anyone with stiff joints or arthritic fingers will experience difficulties. Further, the one-hand manual alphabet is subject to many small variations from person to person. Two people, both of whom feel they know the system well, often find it necessary to go through the alphabet together for a brief comparison of letters before they can converse readily. Though the manual as used by deaf-blind persons in the United States is based on the system as employed by the sighted deaf, the latter form their letters in the air for visual reading and preliminary explanation of how to form them in the hand is often helpful.

The One-Hand Manual Alphabet

The listener places his or her hand lightly over (some prefer under) the speaker's hand to feel the position of the speaker's fingers. The speaker should be careful to move the fingers directly from the position of one letter to the next and to pause briefly between words. The listener should keep his touch as light as possible and avoid "strangling" the speaker's fingers in the manner of an affectionate octopus.

The position of the hand, unless otherwise specified, is up with the palm turned away from the speaker. The elbow should point down, the shoulder should be relaxed, and most of the action should be from the wrist through the fingers.

A—Fold the four fingers flat against the palm and point the thumb up, holding it tightly against the bent index finger.

B—Point the four fingers straight up, holding them tightly together, and bend the thumb across the palm.

C—Holding the four fingers together, curve them downward and curve the thumb upward toward the tip of the bent index finger (looks like a print C).

D—Point the index finger straight up and make a circle with the tip of the middle finger and the thumb. The fingers are curved tightly together.

E—Bend the thumb across the palm and place the tips of the four fingers tightly together along the upper edge of the thumb.

Stop at this point and review. Actually make the letters with your right hand. Spell in the air when practicing alone. Practice the words in the following list, all of which can be spelled from letters you've already learned: bed, bad, dad, ace, decade, ebbed, beaded, cede, cad, bade.

F—Bend the index finger forward. The other three fingers and the thumb point straight up. Hold the fingers tightly together and place the thumb against the second joint of the index finger.

G—Drop the hand by bending the wrist so that the hand is horizontal and the palm inward. Point the index finger and the thumb, curling the other three fingers into the palm (the thumb and index finger nearly touching). (G may stand for the gun that you appear to be pointing).

H—This letter is made exactly like G except that the middle finger also is pointing, held tightly against the index finger.

I—Make a fist and point the little finger straight up.

J—Starting with I, bring the tip of the little finger down and then up to the left in a hook, moving the whole hand from the wrist. (You are drawing the letter J.)

Time to review again. Spell the following words in the air, checking for accuracy whenever in doubt: fig, feed, head, high, jab, ice, each, chef, beached. We are chewing the one-hand manual alphabet a mouthful at a time to prevent indigestion.

K—Point the index and middle fingers straight up, separated. Place the tip of the thumb between the two fingers at the base. The ring and little fingers are curved into the palm.

L—Point the index finger straight up and thumb at right angles to it. The other fingers are curved into the palm.

American One-Hand Manual Alphabet



A



B



C



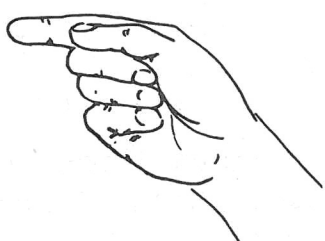
D



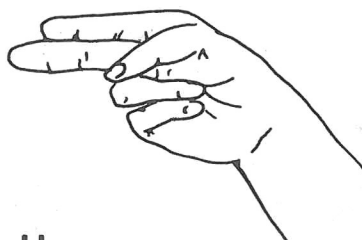
E



F



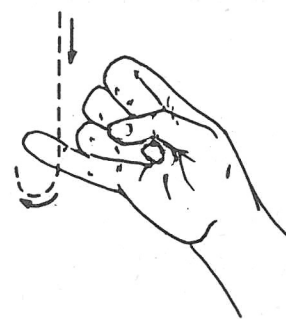
G



H



I



J



K



L



M



N



O



P



Q



R



S



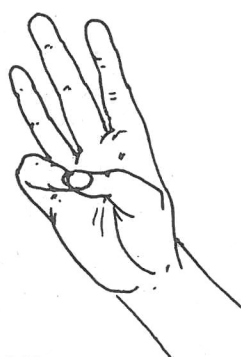
T



U



V



W



X



Y



Z

M—Holding the little finger down with the tip of the thumb, bend the index, middle and ring fingers over the thumb, holding them tightly together and pointing downward.

N—N is made exactly like M except that the ring and little fingers are held down with the tip of the thumb and only the index and middle fingers are bent over the thumb.

O—Make a circle with the four fingers and the thumb by placing the tip of the thumb against the tip of the index finger, holding the four fingers tightly together.

After reviewing the last five letters and any earlier letters about which you may feel qualms, spell in the air the following words: look, moon, balloon, knee, moan, and, foam, diamond, beneficial, bleak, and macaroni. The alphabet has been divided at various times into groups of similar letters, with somewhat mixed results. Some learners thought the grouping of similar letters helped them memorize. Others felt the system merely gave them one more thing to keep track of—that is, which letters are in which groups. In this paper we are presenting the letters in squads of five, each squad followed by appropriate practice words, and the result should be straightforward, morale-boosting progress from A through Z.

P—By bending the wrist slightly, drop the hand halfway, extended away from self with the palm turned down. Point the index finger out and the middle finger down. Place the ball of the thumb against the first joint of the middle finger and curl the ring and little fingers into the palm.

Q—Q is made exactly like G except that the whole hand is pointing downward and the thumb and index finger are slightly more separated.

R—Make a fist with the index and middle fingers pointing up—middle finger crossed over index finger.

S—Make a fist with the thumb across the front of the fingers to touch the second joint of the ring finger.

T—Make a fist with the tip of the thumb pointing up between the index and middle fingers.

U—Make a fist with the index and middle fingers pointing up straight, holding them tightly together.

We have added a bonus sixth letter to the usual group of five this time—and for excellent reason. How often could we use Q in spelling a word if we

do not also know how to sign U? After reviewing the letters in this fourth group, spell in the air the slightly bizarre thought: Peter Piper quaffed a quart of simple mountain seal oil.

V—Make a U with the index and middle fingers separated (looks like a letter V).

W—Point the index, middle, and ring fingers up, holding them separated, and curl the thumb and little finger into the palm (looks like a letter W).

X—Make a fist and raise the index finger by straightening it at the knuckle joint but keeping it bent at the other two joints to look like a hook.

Y—Point the little finger and thumb up straight with a slight outward slant. The other three fingers are bent down.

Z—Make a fist and point the index finger. With the tip of the index finger, draw a zigzag as follows: make a horizontal stroke from left to right, a diagonal stroke down to the left, and a horizontal from left to right. Imagine your index finger printing the letter Z.

Which letters of the one-hand manual alphabet resemble print? After reviewing the last five letters, spell in the air: a fox, a walrus, and a young zebra—just the kind of company I've always wanted on an exciting night in Paris.

There are almost as many ways of reading or listening to the one-hand manual as there are people to read or listen. Some prefer to have the letters made straight down into the palm. Some like to touch the back of the speaker's hand with both of their own hands. The right method is the one that proves to you to be the clearest, most comfortable, most rapid, and least likely to cause misunderstanding or to require repeats.

The one-hand manual alphabet is a challenge to each of its users. Like a spirited horse, it needs to be mastered through individual patience and skill.

The Two-Hand Manual Alphabet

In Great Britain and in most other English-speaking countries except the United States, the two-hand manual alphabet is the most popular special communication method. The descriptions "one-hand" and "two-hand" refer to the ways in which the letters are made. With the former, the speaker forms a complete letter with his or her hand and the hand of the listener is expected to recognize it. With the latter, both the speaker's hand and the listener's hand are essential to form a letter, though the listener's hand remains open and

perfectly quiet. The distinction is at best somewhat technical and need not detain us here. Many users of the one-hand manual, for instance, actually blend the two ways of reading.

The two-hand manual alphabet has certain very real advantages to offer. It is simpler, easier to learn, perhaps easier to read. The fact that many of the letters resemble print letters is a memory aid to friends with normal sight. The greater simplicity of the letters means fewer variations from person to person in the way the letters are formed. Though the two-hand manual alphabet does not usually lend itself to such dazzling speech as a few have attained with the one-hand manual alphabet, it does offer a reasonable pace for most and is especially kind to anyone with stiff fingers. As one often-dated, deaf-blind coed who knows both manuals demurely put it: "I choose my manual to suit my man."

Ideally, the speaker should sit beside the listener, to the listener's left. He or she should take the listener's left hand, resting the back of it on his or her own left palm. The speaker then makes the letters with his or her own right hand on the listener's left hand in the following ways:

The five vowels, A E I O U, are indicated by tapping the listener's fingertips in this order: thumb, index finger, middle finger, ring finger, and little finger.

B—The fingers are bunched so that the tips meet in an irregular ring and placed in that form in the palm of the hand.

C—The index finger makes a circular flick along the inner side of the thumb and along the curve between the thumb and the index finger, finishing at the tip of the index finger.

D—The tip of the index finger touches the tip of the listener's index finger, while the tip of the thumb touches the base of the index finger.

F—The index and middle fingers are placed close together at right angles across the index finger.

G—The fist is clenched and placed in the palm, with thumb in highest position and little finger on the palm.

H—The palm of the speaker's hand is moved swiftly across the listener's palm. (The motion suggests the breathy sound of H.)

J—The tip of the index finger touches the tip of the middle finger and strokes down it to the base.

K—The index finger is bent, palm turned down, and the bent second joint touches the second joint of the listener's index finger.

L—The index finger is laid across the palm.

M—The first three fingers, touching, are laid across the palm.

N—The first two fingers, touching, are laid across the palm.

P—The tip of the index finger is lightly held by the tip of the index finger and thumb. (This letter is simply a pinch of the tip of the index finger.)

Q—The index finger is placed in the fork between the index finger and the thumb and hooked round the base of the thumb.

R—The index finger is bent and laid across the palm.

S—The index finger is bent and linked with the little finger.

T—The tip of the index finger should touch the edge of the palm at the side farthest from the thumb.

V—The index and middle fingers are separated as far as possible and laid across the palm.

W—The palm of the hand is laid flat across the fingers and the fingers are bent over and round the fingers.

X—The index finger is laid at right angles across the index finger.

Y—The index finger is placed in the joint between the thumb and the index finger.

Z—The tips of the fingers in a row touch the middle of the palm.

The speaker should pause briefly between words. If both speaker and listener are familiar with contracted braille, abbreviations may be used. However, when a really good rate of speech has been worked up in either the one-hand or two-hand manual alphabet methods, most people find that abbreviations cause more confusion than they are worth. One exception is to abbreviate a long name by using just its first syllable, such as abbreviating Mr. Nuttingham into Mr. Nut. Obviously, even here there is danger if the deaf-blind person habitually shortens his spoken speech to match the abbreviation!

The International Morse Code

The International Morse Code merits discussion in this chapter because it will prove itself invaluable in connection with the telephone. Even as a straightforward communication method among persons within touching distance of one another, the International Morse Code has the advantage of being inconspicuous, applicable to any part of the body, potentially rapid, and familiar to many Boy and Girl Scouts, members of the Armed Forces,

and amateur radio operators. At its simplest, the dash is merely a stroke with the tip of the index finger, the dot a tap. When written in braille, braille dot 1 is used for the code dot and braille dots 1 and 4 are used for the dash.

A	·—	N	—·
B	—···	O	—---
C	—···	P	·---·
D	—··	Q	—··—
E	·	R	·—·
F	·---·	S	··
G	—··	T	—
H	···	U	··—
I	··	V	··—
J	·---—	W	·---
K	—··	X	—··—
L	·---·	Y	—··—
M	—	Z	—··

Our Response

Since conversation is a two-way affair, we must have something to contribute. The man or woman who is deaf, blind, and mute has an extra challenge to overcome in carrying on successful communication—and many such people have shown heartwarming resourcefulness in doing so.

In the first place, one can often convey one's thoughts in writing. A pencil and pad are handy if

one knows penmanship. Messages can be typed on file cards and labeled in braille for use in later situations, as when traveling. In fact, many deaf-blind people with clear speaking voices find file cards bearing typed addresses or instructions a good thing to carry when they wish to make doubly sure they are understood. Several very small portable typewriters are now produced that will even fit into a suitcase. For braille-reading friends, the Perkins or Lavender Brailers, the miniature Banks Pocket Writer that brailles on a thin ribbon of paper, and the ordinary pocket braille slate and stylus offer resources.

Printing in the air, manualing in the air, and pointing to the letters on a braille or raised-print alphabet board are practical methods. Others must necessarily spell out their words to us. Those of us who cannot speak must simply spell right back to them in the clearest and most mutually congenial way.

Each person's voice is distinct, a product of his or her physique, personality, background, and special problems. Regarding our individual strengths and weaknesses, we can ask for candid opinions from our friends. We may also profit from discussing specific speech problems with professional speech therapists or with deaf-blind persons who have done notable work in building their own voices.

The author of this will now stop and read what he has written—aloud. Nothing does more for a voice than daily reading aloud.